CLAIMS:

15

- 1. A unit cell for a digital to analog conversion circuit comprising;
- a current source (CS);
- a first data switch (S1) coupled to the current source (CS);
- a second data switch (S2) coupled to the current source (CS);
- 5 a first phase switch (Phi1) coupled between the current source (CS) and the first data switch (S1);
  - a second phase switch (Phi2) coupled between the current source (CS) and the second data switch (S2);
- a controller arranged to switch between the first (Phi1) and second (Phi2) phase switches in a Break Before Make alternating sequence, and to switch the first (S1) and second (S2) data switches in a Make Before Break sequence.
  - 2. A unit cell for a digital analog conversion circuit according to claim 1 wherein the phase switches (Phi1 and Phi2) are formed of MOS transistors.
  - 3. A unit cell for a digital analog conversion circuit according to claim 1 or claim 2 wherein the data switches (S1 and S2) are formed of MOS transistors.
- A unit cell according to any one of claims 1, 2 or 3 wherein the data switches
   (S1 and S2) each comprise first (D1+, D2+) and second (D1-, D2-) transistors with common connected sources/emitters, with the drains collectors coupled respectively to first (Outputs) and second (Out min) output lines.
- 5. A unit cell according to claim 4 wherein a third transistor (D1d, D2d) is
  25 preferably provided for each data switch (S1, S2) wherein the source/emitter of each of the
  third transistors (D1d, D2d) is coupled in common with the respective first (D1+, D2+) and
  second (D1-, D2-) transistors and with its drain/collector coupled to a third output line
  (Outdump).

WO 03/092163 PCT/IB03/01010

6. A unit cell according to Claim 4 or Claim 5 wherein the gate/bases of each transistor are coupled to the digital data input.

8